

## **VPDES PERMITS**

## Threatened and Endangered Species Coordination

To:	Date Sent: 12/16/2015  Permit Number: VA0004146
Facility Name: Chesterfield Power Station Contact: Ken Roller Phone: 804-273-3494 Address: 500 Coxendale Rd., Chester, VA 23836	Location: USGS Quadrangle: Drewrys Bluff Latitude/Longitude: 37°22'19" -77°23'04" Receiving Stream: James River Receiving Stream Flow Statistics used for Permit: See Attachment A
Effluent Characteristics and Max Daily Flow: Once through Cooling water, low volume wastewater and wastewater from coal ash impoundments See attachment B and attached existing permit	Species Search Results (or attach database report and map):  See attached map and species list

Attach draft permit effluent limits page if available or attach existing effluent limits page (make sure it is clear in your email which one it is – draft current or existing).

DGIF email: <u>Gladys.Cason@dgif.virginia.gov</u> USFWS email: <u>margaret\_byrne@fws.gov</u>

DCR: If Natural Heritage Data Explorer (NHDE) has the needed information DCR does not need this form. If you have additional information you wish to add, you may do so in the comments field on the NHDE form. DCR will contact you directly if they need more information.

## Attachment A

OUTFALLS	001	002	003	301	302	303	004	401	402	005
Receiving Stream	James River, Main Channel	James River, Main Channel	James River (Farrar Gut)	Internal Discharge to OF 003	Internal Discharge to OF 003	Internal Discharge to OF 003	James River (Farrar Gut)	Internal Discharge to OF 004	Internal Discharge to OF 004	James River (Farrar Gut)
Lat/Lon	N 37°22'58" W 77°22'51"	N 37°22'58" W '°22'48"	N 37° 22′ 19″ W 77° 23′ 4″	N 37°22'71" W 77°23"02"	N 37°22'58" W 77°23"10"	N 37°22'35" W 77°23"04"	N 37°22'18" W 77°22'54"	N 37°22'35" W 77°23'04"	N 37°22'58" W 77°23'09"	N 37°22'20" W 77°21'50"
Basin	James River (Lower)	James River (Lower)	James River (Lower)	James River (Lower)	James River (Lower)	James River (Lower)	James River (Lower)	James River (Lower)	James River (Lower)	James River (Lower)
Subbasin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Section	1	1	1	NA	NA	NA	1	NA	NA	1
Class	II	II	II	NA	NA	NA	II	NA	NA	II
Special Standards	bb	bb	bb	NA	NA	NA	bb	NA	NA	bb
River Mile	2- JMS097.70	2- JMS097.70	2- JMC003.77	NA	NA	NA	2- JMC003.75	NA	NA	2- JMC000.37
Low Flow 1Q10 (MGD)*	TIDAL	TIDAL	0	NA	NA	NA	270	NA	NA	TIDAL
Low Flow 7Q10 (MGD)*	TIDAL	TIDAL	0	NA	NA	NA	270	NA	NA	TIDAL
Low Flow 30Q10 (MGD)*	TIDAL	TIDAL	0	NA	NA	NA	270	NA	NA	TIDAL
Low Flow 30Q5 (MGD)*	TIDAL	TIDAL	0	NA	NA	NA	270	NA	NA	TIDAL
High Flow 1Q10 (MGD)*	TIDAL	TIDAL	0	NA	NA	NA	270	NA	NA	TIDAL
High Flow 7Q10 (MGD)*	TIDAL	TIDAL	0	NA	NA	NA	270	NA	NA	TIDAL
High Flow 30Q10	TIDAL	TIDAL	0	NA	NA	NA	270	NA	NA	TIDAL

OUTFALLS	001	002	003	301	302	303	004	401	402	005
(MGD)*										
HM (MGD)*	TIDAL	TIDAL	0	NA	NA	NA	270	NA	NA	TIDAL
Tidal	Yes									
303(d) list**	Category 5D	Category 5D	Category 4A							

<sup>\*</sup>The James River is tidally influenced at the discharge points. Flow frequencies cannot be determined for tidal waters; therefore, the tidal default dilution ratios are used to evaluate outfalls 001, 002, and 003. Farrar Gut is also tidal; however, the gut is dominated by the discharge from the power station's Outfall 003. The 10<sup>th</sup> percentile of effluent flow from Outfall 003 is therefore used as the ambient flow for the analysis of Outfall 004. Outfall 003 discharges at the head of Farrar Gut, so Outfall 003 is treated as if discharging to a free-flowing intermittent stream.

<sup>\*\*</sup> Category 5D means the Water Quality Standard is not attained where TMDLs for a pollutant(s) have been developed but one or more pollutants are still causing impairment requiring additional TMDL development. Category 4A means the water is impaired or threatened for one or more designated uses but does not require a TMDL because the TMDL for specific pollutant(s) is complete and US EPA approved.

## Attachment B

		исинент В		
Outfall Number	Wastewater Source	Treatment	<pre>Flow, MGD   (maximum   of 30-day   averages)</pre>	
001	Cooling Water from Units 7 and 8	Dechlorinatio n	212	
002	Cooling Water from Unit 3	Dechlorinatio n	89	
003	Cooling Water from Units 4, 5, and 6	Dechlorinatio n	753	
301	Discharge from Low Volume Wastewater Treatment System (LVWWTS) - will receive coal pile retention basin discharge, master sump effluent, FGD yard sump effluent, bottom ash handling area runoff, sierra ditch stormwater runoff, upper ash pond (UAP) toe drain discharge, lower ash pond (LAP) toe drain discharge, leachate and contact stormwater from Fossil Fuel Combustion Product (FFCP) Management Facility, Discharge from Internal Outfalls 302 and 303 (see discussions for Internal Outfalls 302 and 303 below)	Sedimentation , oil and grease removal, neutralizatio n	13.29*	
302	FGD wastewater	Wastewater equalization, pH elevation, gypsum desaturation, heavy metal precipitation  coagulation, flocculation, clarification , pH adjustment, and sludge dewatering. Wastewater treatment is achieved through chemical addition. See Attachment 2.	0.11	
303	Metals Cleaning Wastewater	Lime addition, mixing, and chemical precipitation	2.7	
004	Discharge from old ash pond - receives ash sluice water and wastewater from sumps throughout the station (low volume wastes,	Settling, skimming. Some of the sources to	17.47	

	non-chemical cleaning wastes, screen backwash associated with reuse of Proctor's Creek WWTP effluent, wastewater from the station's car wash (non-chemical), storm water from the Unit 6 FGD runoff collection system, coal pile runoff, Water Treatment Plant wastewater, a portion of Drainage Area 4 and various other onsite tank containment areas including the station's light oil storage tank. Outfall 004 also receives the treated discharge from the metals treatment pond and the treated discharge from the FGD WWTP.	the old ash pond receive treatment prior to discharge to the ash pond. There is also occasional chemical coagulation and pH adjustment as needed. See Attachment 2.	
401	Metal cleaning wastewater	See Internal Outfall 303 above.	2.7
402	FGD wastewater	See Internal Outfall 302 above.	0.11
005	Storm water runoff from coal ash pond closure and recovery wells/toe drains.	Settling, skimming	4.05 (Max of 30 day maximum)